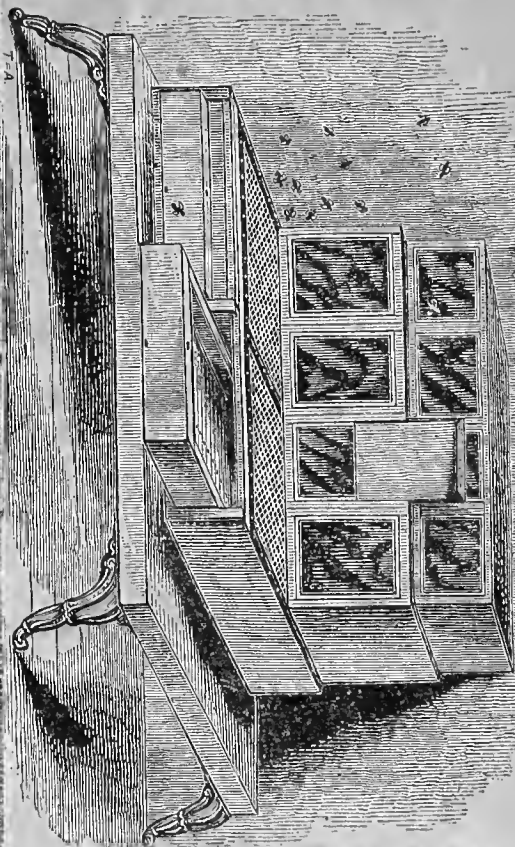


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S. DAVIS'
PLATFORM BEE-HIVE.
WITH INSTRUCTIONS.

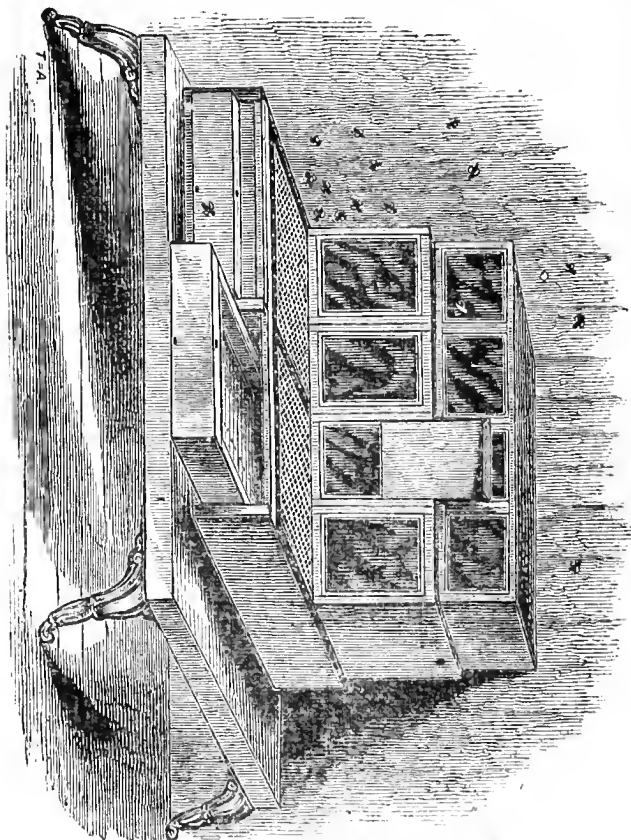


PATENTED JULY 26, 1853.

CLAREMONT, N. H.

POWER-PRESS OFFICE.....N. W. GODDARD, PRINTER.

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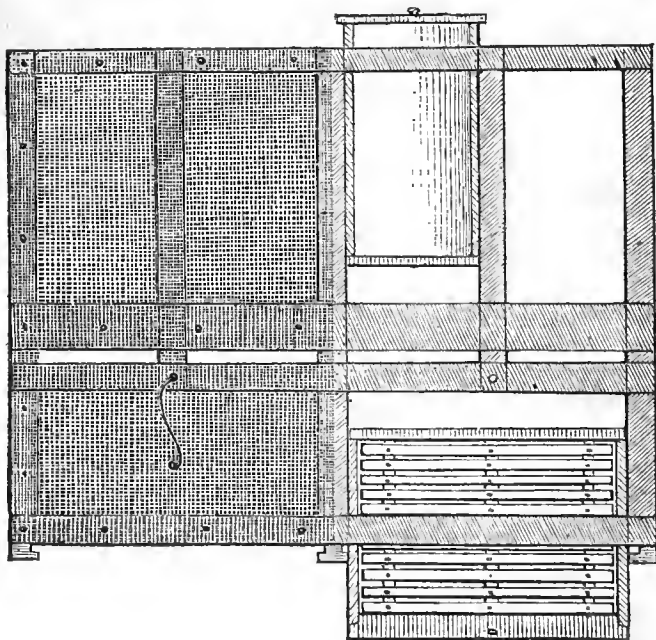
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DIRECTIONS FOR MAKING S. DAVIS' PLATFORM FOR BEE-HIVES.



In explaining this Hive, we term the side where the bees pass in and out, the back side.

The bottom-board is to be $26\frac{1}{4}$ inches wide, and of any length desired, of matched boards $\frac{3}{4}$ inch thick.

Make risers of $1\frac{1}{2}$ inch plank, one half of them $26\frac{1}{4}$ inches long, the other half $14\frac{1}{4}$ inches long and 7 inches high. Saw out of the lower corners of each riser at the back end $\frac{3}{4}$ of an inch, and $5\frac{1}{4}$ inches up; then from the

top, at the back end, notch in $\frac{3}{4}$ of an inch deep, and $1\frac{1}{2}$ inch long; then, 14 inches from back end, saw and take out a piece $\frac{3}{4}$ of an inch deep and 5 inches long; then cut a groove, $\frac{1}{2}$ inch deep and $2\frac{3}{4}$ inches long, on each side, directly under the notch, commencing $\frac{1}{4}$ of an inch from the back side of said notch.

At the top, at the front end, notch out $\frac{3}{4}$ of an inch deep and $2\frac{1}{4}$ inches wide.

Then commence at one end of bottom board, place first a long then a short riser once in 8 inches from center to center, having the lower corners even with the bottom board on the back side. Then put on a back board $\frac{3}{4}$ inch thick and 6 inches wide; then put a strip $\frac{3}{4}$ inch thick $1\frac{1}{2}$ inch wide, on the top at the back end of risers.

Then make a slide to reach from one long riser to another, $\frac{1}{2}$ inch thick and 1 inch wide; cut a notch in the middle of the upper side, to receive a string, and place this slide in the groove.

Then put 2 strips into the notch, $\frac{3}{4}$ inch thick, $2\frac{1}{4}$ wide, whole length of platform, with a block between them on each riser, $\frac{1}{2}$ inch wide, $\frac{3}{4}$ thick, $1\frac{1}{2}$ long; then on the top, at the front end of the risers, a strip $2\frac{1}{4}$ inches wide, $\frac{3}{4}$ thick.

Put a cleat $\frac{3}{4}$ inch thick on the front end of each riser, with grooves to receive slide doors. Put cleats on each riser, on a level with the top of the back board, to slide the filth-drawers on.

Make filth-drawers of $\frac{1}{2}$ inch boards, $14\frac{3}{4}$ inches long, (including cleat on the outer end.) Set said cleat down $\frac{1}{8}$ of an inch to give the millers space to enter. Make it wide enough to fill between the risers, and one inch deep.

Take wove wire 2 feet wide and cover the platform, letting it go back within $\frac{5}{8}$ of an inch of the back side.—Cut the wire in the center, over the half inch space, and bend it down so the bees can pass into the feed-drawers.

Put blocks $\frac{3}{4}$ inch square, $1\frac{1}{2}$ long, at the back side, over each riser, for hives to set against.

Make a hole through the strip under the front end of the hives, commencing near the front edge at the top, and running out $\frac{3}{8}$ of an inch from the back side at the bottom. Insert a string and tie it around the slide.

The feed-drawer is made of inch boards, *except the front end* which is made of plank $14\frac{1}{2}$ inches long and 4 inches wide, with a half inch hole in the center, commencing at the outer edge at the top and running in at the bottom.— The side boards are 4 inches wide, $10\frac{1}{4}$ inches long and grooved into the plank $\frac{1}{4}$ inch. The back board is $5\frac{1}{4}$ inches high, $14\frac{1}{2}$ long, and nailed on the back end of side boards. Then cut a channel across the bottom board to match the hole in front. Put on the bottom board with paint and nails. 3

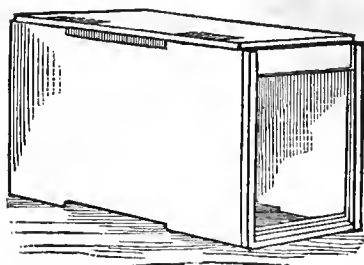
THE FLOAT, OR RACK, FOR THE FEED-DRAWER.

This is made of light pine, $\frac{1}{8}$ of an inch thick and $\frac{3}{4}$ of an inch in width. Commence by placing a strip near each end; then place on strips $\frac{1}{8}$ of an inch apart; then, directly over the first strip, place two more, and one in the center; then bevel the upper edges of another set and place them directly over the second strips, and tack all together.

This rack should be large enough to fill the feed-drawer within $\frac{1}{8}$ of an inch all around.

THE WINTER FEED-DRAWER.

This is made 8 inches wide, $14\frac{3}{4}$ long, and 6 high, with a partition, 1 inch from the left-hand side, 4 inches high, and a cover with ventilation on the top, with holes in the left-hand side of bottom board, being made to match the holes in the top of the hives.



THE HIVE.

Made of $\frac{3}{4}$ inch boards. Get out your side-boards 16 inches long and 11 inches high; cut a notch in the middle of the upper edge 6 inches long and $\frac{3}{4}$ deep; in the middle of the bottom edge $8\frac{1}{2}$ inches long and $\frac{3}{8}$ deep, except the two outside hives, which are to be made whole on the outside. 3/8

The back is of the same height, 7 inches long, and grooved in, so as to make the hive eight inches wide on the outside, with a hole at the bottom 2 inches long and $\frac{3}{8}$ of an inch deep, with a button to cover. 3/8

The front ends of the side-boards are to be grooved in $\frac{1}{4}$ of an inch, to admit 7 by 9 glass. Fit in a brace at the top front corners 7 inches long, $1\frac{1}{4}$ inch deep, and $\frac{3}{4}$ thick, with the lower front corners grooved off $\frac{1}{4}$ inch to admit glass. Then $\frac{1}{2}$ inch up from the bottom front corners, fit a brace 7 inches long, $\frac{3}{4}$ inch square, with the upper front corners grooved off $\frac{1}{4}$ inch to admit glass. Then nail on a cleat in front of the last named cleat even with the bottom of the hive, $\frac{3}{4}$ of an inch square and 8 inches long.— Then on the ends of side-boards put cleats $10\frac{1}{4}$ inches long, $\frac{3}{4}$ inch square, with the inner corners grooved to admit slide door to cover the glass.

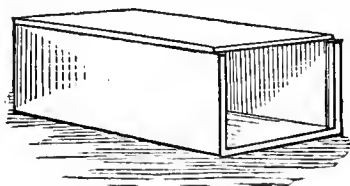
Put a cleat at the top of the slide door to brace it and to compare with the side cleats. Put three slats across

the bottom of the hive, one at each end and one in the center, (*of where the bees pass*) drop them in even with the upper side of said pass.

The top is to be made of $\frac{1}{2}$ inch boards, 8 inches wide and 15 inches long, with two holes $3\frac{1}{2}$ inches long and $\frac{3}{4}$ of an inch wide, on a line parallel to the left-hand side, even with the side of the hive, and commencing 1 inch from each corner.

Put four small ribs in the top of the hive, set the two first one inch from each side, and the other two will be $1\frac{1}{2}$ inch apart, *for a guide for brood comb*.

The hives may be made larger if preferred, but this is about the size I should recommend.



THE HONEY-BOXES.

These are to be made of thin boards $14\frac{3}{4}$ inches long, 8 inches wide, 6 inches high, with glass in front end, 1 inch ventilator close to the top on the back end, with holes in the bottom to match holes in the top of hives. They may be made larger or smaller, if desired.

The caps, or chambers, are made of $\frac{1}{2}$ inch boards, 16 inches wide, 7 inches high, on front and back side, with the end boards $\frac{1}{2}$ inch less, so the side-boards will set down on the shoulder of hive, with ventilators close to the top on the back side, not having them directly opposite to those on the honey-boxes: they may be made long enough to cover from two to four hives, with one ventilator to each two hives, 2 inches square. All the ventilators are made of wove wire.

THE TRANSFERRING BOX

May be made of $\frac{3}{4}$ inch boards, $14\frac{1}{2}$ inches long, 1 foot wide, $2\frac{1}{4}$ inches deep on the outside—leaving off one side-board, making the other side-board $1\frac{1}{4}$ inch wider than end-boards, then get out 2 cleats $1\frac{1}{4}$ inch square, $8\frac{3}{4}$ inches long, nail them on the ends of the box even with the open edge of end-board, and even with the outer edge of side-board.

DIRECTIONS FOR MANAGING BEES.

The best way is to swarm them into the new hives, commencing with the end hive, having all the connecting holes covered with tin. Place the hive on the end of the platform, and as fast as the swarms come out place the hives close together, one after another, putting between them perforated tin or wove wire, and taking out the whole tins, let them remain till spring. Then move the full hives gently apart, cleaning as you proceed, and place two empty hives alternately between the full ones, keeping the buttons closed on the full hives, and making the bees pass through the empty ones; in this way you will prevent the bees from swarming. But if you wish them to swarm, you may have them swarm out of one hive, or put two or three hives in connection, having the buttons all closed, except one hive, until after swarming, then all may be opened.

FOR TRANSFERRING BEES FROM OLD HIVES INTO NEW ONES.

First, make a hole in the front of the old hive, to match the connecting hole in the side of the new hive. Place the new hive on the platform and set the old hive in connection with it, making the bees pass through the new hive.

When the new hives are nearly filled, slide the old hive off and put an empty hive between, and still another, if they continue to fill. Let the old hive stand till about the 20th of August, then start the old hive from the new one about one eighth of an inch. Rap on the old hive, and

then commence smoking with any mild herbs through the miller-drawer under the old hive, rapping on the hive occasionally, and the bees will soon leave it and pass into the new hive. Then slide a tin over the connecting-hole of the new hive and take the old hive away.

TO TRANSFER FROM ONE NEW HIVE TO ANOTHER, WHEN IT IS NECESSARY TO GIVE THE BEES NEW COMB.

About the 15th of July, put perforated tin, or wove wire, over the connecting holes of the hives each side of the hive which you wish to transfer; also a tin under the front end of the hive that sets over the same feed-drawer. Then put a tin slide at the top and bottom of the hive, with the edges turned sufficiently to cover the connecting-holes.

Take off the hive and turn it bottom up, under the transferring box, which is first placed in over the feed-drawer. Put an empty hive in place of the old one; then remove the slide from under the transferring-box, and rap on the hive, and the bees will pass through into the empty hive. Let the perforated tins remain a few days, then remove them, letting the bees together.

About the 10th of August (at night) close all the buttons. Stop (with perforated tin or fine wove wire) all connecting holes between the hives. The next morning open every other button, at night close them; the next day open the others. The hives that have queens will work readily. Mark those that do not work as having no queens, and place them in connection with a hive which has a queen, both over one feed-drawer, having no tins between them; let the rest of the tins remain until you move the hives apart to put in empty hives. In this way you have a full supply of queens. Keep feed in feed-drawers while the operation goes on.

As soon as it becomes sufficiently warm, and the bees show a desire to get out, then shove back the slide and let them down into the basement; let them exercise and empty themselves through the day, and at night close them

up and clear out the filth. Then commence feeding, *with the cheap feed*,—feed them sufficiently to encourage them and to have their hives filled with honey, grubs, eggs and young bees by the time blossoms appear; then take the feed away, scald the drawer, and put in the door. When blossoms disappear, commence feeding with choice feed, and continue to feed until prevented by the cold. Then take off the boxes, put wove wire over the holes on top of the hives, put on the chamber, close the buttons, shut the slide, take out the feed-trough, put in the doors, and let them remain quiet until spring.

After the snow has gone and the weather sufficiently warm, you may let them out, *but not before*. The slide back of the feed-drawer is to be closed whenever the drawer is removed; take hold of the string, keep it close to the drawer, so as not to kill the bees. The slide should be closed except when feeding.

When feeding, slide tins under front ends of all the empty hives, over the same feed-drawers, to prevent robbery.

There may be a faucet in front of feed-trough to match the channel in bottom board, to take off the feed and scald it if it is likely to sour. *Scald your feed-drawers often*.

Should it become necessary to feed in cold weather, use the winter feed-trough, *in the chamber*.

The ventilation may be increased by starting out the miller-drawers, more or less.

$\frac{1}{8}$ The filth-drawer may be put in, from the inside, by leaving $\frac{3}{4}$ of an inch space at the top of the back-board for millers to enter.

When your swarms are young, and hives new, or when you wish to be gone some length of time, crumble some old comb into the miller-drawers; be sure to kill the worms often, and return a portion of the filth in the drawers.

The wire should be No. 24 or 25, and 12 mash, and varnished.

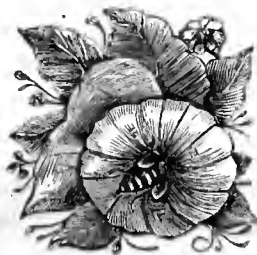
AN APIARY.

This may be made from 4 to 8 feet wide, and 8 feet in the clear, running north and south, with a full supply of glass windows on the east side, which may be rolled away and their places supplied with wove wire windows during the warm weather. There should also be shutters for winter.

On the west side, 16 inches from the floor, is an opening 11 inches high, extending the whole length of the building; and 25 inches above this, should be another of the same dimensions, with swing door. The roof should descend to the east, unless you have an eave-trough.

THE HONEY-BEE.

All that is necessary to say about bees, is, give them a good house, well located; good hives, well ventilated; keep the filth-drawers well cleared; keep them in as even temperature as possible in the summer, cool and dry in the winter, and till it is warm enough in the spring to allow them to fly out; and let them remain as quiet as possible.



QUEEN BEE.



DRONE.



WORKING BEE.

SYLVESTER DAVIS' BEE FEED.

NO. 1, FOR BEST BOX HONEY.

Take 25 lbs. best West India honey, 25 lbs. white crushed sugar, 40 lbs. water; put it in a brass or tin kettle and keep it over a slow fire until the scum rises; skim clean, take it from the fire, then add 1 gill of salt and $\frac{1}{2}$ oz. essence of anise, stir it well together; when cold add $1\frac{1}{2}$ pint mucilage of slippery elm, $\frac{1}{2}$ gill of porter (or ale) and stir until well compounded.

NO. 2, FOR FEEDING IN THE SPRING & LATE SWARMS.

Take 40 lbs. W. I. honey, 10 lbs. brown sugar, 40 lbs. water, 1 gill of salt, $\frac{1}{4}$ oz. essence of anise, $1\frac{1}{2}$ pint mucilage of slippery elm, 1 gill of porter (or ale,) prepare the same as No. 1.

You may flavor your box honey to suit your fancy, with any of the essential oils, by putting a few drops into the feed while it is hot.

You will add much to the increase and health of your Bees by roasting a bird, prepared the same as you would for your own eating, and put it in the feed drawer just before the blossoms appear. This assists them in making bread and other food for young Bees.

Do not neglect to give them clear, cool, salted lime water to drink in hot weather.

FOR MILLER WASH.

Take strong White Lime, slake it with hot water, make it about as thick as paste, then add one gill of fine salt to each quart—use it freely over every portion of the bottom boards and hive, washing up on the inside of the hive two or three inches. Use it as often as is necessary to stop all cracks.

Put under each hive about two-thirds of a tea-spoonful of Camphor Gum, (about as fine as small peas) in the spring and fall.

☞ Remember the bonds you are under to keep this a secret.

